

Mapopolis 5.0 User's Guide

Contents

1. Introduction	3
2. Explanation of Maps	4
2.1 Types of maps	4
2.2 Map Naming	5
3. Basics	6
3.1 System Requirements	6
3.2 Installation	6
3.3 Starting Mapopolis on Your Handheld	7
4. Viewing Maps	8
4.1 Using the Toolbar & Silkscreen Icons	8
5. The Menu	10
6. Maps screen	11
7. Find	12
7.1 Searching for a Street Address	12
7.2 Searching for a Street, City or Place	12
7.3 Searching for a Contact's Address	13
7.4 Searching for a Street Intersection	13
7.5 Searching for a Business Location or Landmark	13
8. Directions	14
9.1 Creating a maplet	15
9.2 Adding Locations to Maplets	15
9.3 Edit info / Edit Locations	15
10. GPS	16
10.1 GPS Settings	16
10.2 Special Instructions for Using a Bluetooth GPS Device	16
11. Settings	18
13. Solutions to Common Problems	20
14. License Agreement	21

1. Introduction

Mapopolis is a personal navigation system designed for Palm handhelds. The software allows you to view maps and generate turn-by-turn directions right on your handheld.

Multiple maps can be stored in the handheld's internal memory as well as external memory cards. When contiguous maps are present on the device, the maps will stitch together to form a single continuous map.

Maps can be scrolled by dragging the handheld's stylus across the screen and can be zoomed from a regional overview view down to viewing a specific street address. The level of detail shown can also be varied for ease of viewing at any zoom level.

Mapopolis includes a powerful find feature, which allows streets, landmarks, and businesses locations to be searched and selected by category, name and city. The selected item or items is then highlighted on the map. You can also search for a street addresses or intersection. Mapopolis GeoMarks technology allows you to easily jump to recently used locations by selecting them from the down arrow on the menu bar or in many menus.

Mapopolis also works Global Positioning System (GPS) devices that use the NMEA protocol. It can automatically scroll the map so that the GPS position is always at the center of the map.

Mapopolis has the ability to automatically generate point-to-point-driving directions on the fly from your handheld. Selecting from the map or using an address Find feature sets start and end points. Directions can be viewed as turn-by-turn text, which also displays distance, as well as a highlighted route on the map.

2. Explanation of Maps

Mapopolis offers a number of different types of maps. They are the Basic, Enhanced, Platinum, Platinum +GPS and Navigator maps. Note that Navigator maps are not yet available for Palm OS handhelds. Maps are available for the entire United States, Canada and Western Europe. Each map file contains information for one region, in the US the maps are segmented by county, segmentation varies in other areas of the world. The map data source for the Basic and Enhanced maps is the US Census Bureau's TIGER 2000 database. The Basic and Enhanced maps are updated when the TIGER database is updated which is generally once a year. The map data for Platinum, Platinum +GPS and Navigator maps is provided by Navigation Technologies. Platinum, Platinum +GPS and Navigator maps are updated quarterly. Updated Map files are currently available from the www.mapopolis.com for an additional fee.

2.1 Types of maps

Basic Maps

Basic maps contain street data, but do not address information, water boundaries or city boundaries. Consequentially, while you can search for road names and intersections, you can't search for specific addresses and can't narrow your search to a city or town. Basic maps require the least amount of memory of all of the map types. Basic Maps are only available for the United States.

Enhanced Maps

Enhanced maps are the next step up from basic maps. They contain the same street data found in the basic maps as well as street address information, water boundaries, city boundaries, and alternate street names. Enhanced maps support searching for street addresses and you can limit your search to a specific city and town which comes in handy when searching for a street that might span multiple cities or a common street such as "Main St." that is present in most cities. Enhanced maps do not support generating turn-by-turn directions. Enhanced maps require approximately 50% more memory than basic maps. Enhanced maps are only available for the United States

Platinum Maps

Platinum maps are larger than basic and enhanced maps. Platinum map data is provided by Navigation Technologies and is generally more accurate than the US Census Bureau-provided Tiger data used in Basic and Enhanced maps. Platinum maps can be used to generate turn by turn driving directions. Platinum maps require approximately three times the memory required for Basic maps. Due to licensing restrictions, Platinum maps do not support GPS. Platinum maps are available for the United States, Canada and Western Europe

Platinum +GPS Maps

Platinum +GPS maps add GPS support to the functionality provided by Platinum maps. Platinum +GPS maps display your route and your current GPS-provided position on the map. Platinum +GPS maps require the same amount of memory as Platinum Maps. Platinum +GPS maps are available for the United States, Canada and Western Europe

Navigator Maps

Navigator maps support active route guidance which provides spoken and visual prompts before each turn. Navigator maps are currently only available for Pocket PC handhelds. Navigator maps require the same amount of memory as Platinum maps. Navigator maps are available for the United States, Canada and Western Europe.

2.2 Map Naming

Many users have inquired as to what the file name of a particular map means. While we do not anticipate that most users will need to use this information, we have provided it for those that are interested.

United States maps begin with the name of the county followed by the two-letter abbreviation for the state. For example: Queens county in New York State would start with QueensNY. The next letter following the name is a “B”, “E”, “P” or “N” or to indicate that it is a Basic, Enhanced, Platinum or Navigator map, respectively. The letter after that is a “G” or “N”, and indicates whether GPS is enabled or not. The letter after that is a “M” or “C”, to indicate if it is for the Palm OS or for the Pocket PC platform. At the end is a two-digit number that denotes the release number of the map. Finally, there is either .pdb or .mlp at the very end of the map name that denotes if file is for Palm OS or Pocket PC, respectively.

In summary, if a map were named QueensNYPNM01.prc, that map is of Queens county in New York state, it is a premium map that is not GPS enabled for the Palm OS platform and it is from release number 01. Please note that changing the file name will not change the map-level or add GPS support to a Platinum map.

3. Basics

3.1 System Requirements

Mapopolis requires a Palm OS compatible handheld running Palm OS 3.0 or later with at least 1 MB of memory. A desktop computer or wireless internet connection is required to download map files to the PDA.

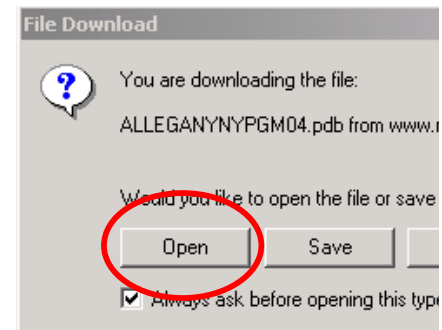
Mapopolis recommends that you use a Palm handheld with at least 8 MB of memory, as many map files will require more than 1 MB of RAM.

A separate version of Mapopolis is also available for Pocket PC handhelds. Mapopolis maintains a list of supported handheld devices on our website at www.mapopolis.com/devices.jsp.

3.2 Installation

Web Site Users

First, download and HotSync the application file Mapopolis.prc to your Palm handheld using the Install Tool. If you have Palm desktop properly configured, this can be done by double-clicking on the file in Windows Explorer or choosing “Open” from the File Download dialog in Internet Explorer. If this does not work, you may not have Palm Desktop installed correctly, re-installing Palm Desktop may easily solve this problem. Second, choose one or more maps from the website. Again, you can either save the maps to disk and double-click them or simply choose “Open” from the File Download dialog in Internet Explorer.



File Download Dialog

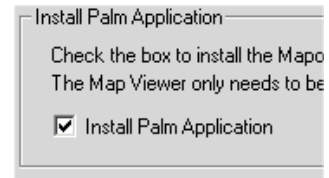
If you need maps for an entire region, Mapopolis also offers ZIP files of each state available for download. To install the maps, choose save from the File Download dialog and save the maps to your desktop. If you don't already have it installed, you will need a utility such as WinZIP to open the ZIP file. WinZIP is available for download (at no charge) from www.winzip.com. Once WinZIP is installed, double click the ZIP file to open the archive, then extract the files to a folder. Simply double-click any files that you want to install on your handheld.

CD Users

The Mapopolis CD will automatically start the Mapopolis Map Loader when it is placed in your CD drive. If for some reason the Map Loader doesn't start, or if you need to re-launch it after closing it, use Windows Explorer to browse to the CD drive and double-click MapInstaller.exe to start the Map Loader.

To use Mapopolis, you will need to install the Mapopolis Application and one or more maps. If this is the first time you have used the Mapopolis CD on this computer, the option to install the application will be already checked. If you need to install the application onto another Palm handheld or re-install it, simply check the box.

To load the maps, choose a state from the Choose a State or Province dialog, and enter a city or landmark name in the Containing Place Name field to search for a particular area and/or click on county names in Click to Install Map to add them to your Files to be Installed list. To remove a file from the list, simply click on it's name in the Files to be Installed list. When you are done selecting counties, select the appropriate user (if you only have one Palm Handheld, you will see only one name in the list) and click the Install Files button to install the files.



Install App Checkbox

3.3 Starting Mapopolis on Your Handheld

Once you have Mapopolis installed on your handheld, tap the Mapopolis icon on the launcher screen to open the application. If you don't see Mapopolis, click on the down arrow in the upper right corner and choose "All" from the drop-down menu. If you still don't see Mapopolis, you do not have the application installed on the handheld. You will see the welcome screen which displays the version number of Mapopolis along with two buttons: "Start" and "Quick Guide". Tap "Start" to go to the map selection screen. After tapping "Start" you will see the map selection screen. If you have installed maps, you will see one or more county names. Highlight the name of map you want to view by tapping on it then tap "view" to load the map.



Mapopolis

4. Viewing Maps

Mapopolis makes viewing maps very easy. You can scroll (move) the map by dragging the stylus across the handheld's screen. As you drag the stylus, the map will re-draw. Maps colors are customizable, configuration information is provided in the settings section. Highways are displayed with a thicker line and a color of your choice (the default is black). All other streets are displayed with thinner lines.

While zoomed out, landmarks and businesses are not displayed. While zoomed in, landmarks and businesses are displayed as small icons. A small airplane icon indicates an airport.

An item that has been selected by tapping on it, or with the find function is displayed at all magnifications. Selected streets are displayed as bold lines. A box is surrounds the icon of a selected landmarks or businesses.

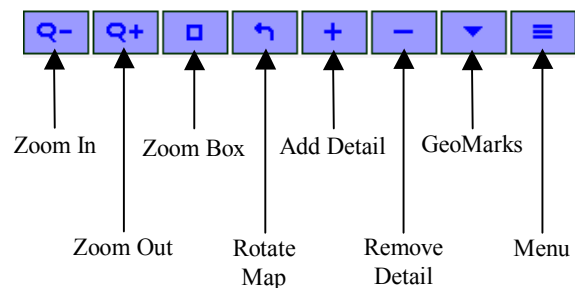
Initially, North is at the top of the screen if the screen is rotated, a small box will appear on the bottom right indicating the direction of North.

The amount of features drawn is determined by the available memory on your handheld, when the memory is exceeded, Mapopolis stops drawing and displays the word MAX in the lower right corner of the screen.

Due to the limited display screen resolution of many handhelds, not all street names are able to be displayed clearly. When the screen is tapped on or near a landmark or business location, a pop-up box will show its name and additional information about it. When the screen is tapped on or near a street, if street address information is present, a house icon will appear along the street and a pop-up box will appear with the approximate street address and any alternate street names. If the street has no assigned addresses, the street name alone will be displayed. Tapping on the pop-up box or elsewhere on the screen will remove it.

4.1 Using the Toolbar & Silkscreen Icons

The Mapopolis toolbar is displayed at the bottom of the screen at all times while viewing a map. Using the toolbar, you can easily zoom in and out, rotate the map, add and remove detail, jump to a recently visited location with GeoMarks and quickly bring up the menu. A diagram of the menu is to the right, and the functions are described in detail below.



Zooming In and Out

Tapping the Zoom In button zooms the map in by two zoom levels. Tapping Zoom Out button zooms the map out by a factor of two. On handhelds with only an up and down button, you can also zoom in using the “up” hardware button and zoom out using the “down” hardware button.

The zoom buttons will be grayed when the map is at the limits of magnification. If you tap on the screen, then tap the Zoom In button, the zoom will center on your tap.

Zoom Box

Tapping the Zoom Box icon, immediately displays a small box containing the words “Draw Zoom Box” centered at the bottom of the screen. Drag the stylus to draw a box on the screen; Mapopolis will zoom in to display the region of the map that you selected on the screen.

Rotating the Map

Tapping the Rotate Map button rotates the map 90 degrees counterclockwise. A small box will appear on the bottom right of the screen with an “N” and an arrow in indicating the direction of North. If the box is not displayed on the screen, then the direction of north is towards the top of the screen.

Changing Level of Detail

The level of detail shown in the map can be increased by pushing the Add Detail button and can be decreased by pushing the Remove Detail button. Zooming the map in and out will automatically add and remove detail as appropriate to the zoom level. One or both of the buttons may be grayed when the map is at the limits of available detail.

Using GeoMarks

Clicking on the GeoMarks button displays a list of recently accessed locations. Clicking on a GeoMarks location in the list takes you immediately to the location on the map. GeoMarks can be used to assist in moving quickly around the map.

Accessing the Menu features

There are two ways to access the features via the Menu. The first is to tap the Menu button in the toolbar while in viewing the map. Or you can tap the silkscreen menu button on the bottom left of the silk screen area close to where you enter graffiti. Additional information on the menu features is provided below.



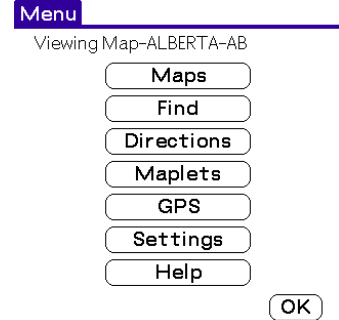
Accessing the Find features

There are two ways to access the Find features. The first is to tap the “menu” button in the map view and then tap “Find”. The second is to tap the silkscreen magnifying glass icon on the bottom right of the silkscreen area. More information on using find is provided below.



5. The Menu

The name of the map that is currently being viewed is printed at the top of the Menu screen. The rest of the Menu Screen consists of buttons to access other functions within Mapopolis, which are discussed below.



Maps

The Maps screen lists all of the maps and maplets that are available on the handheld either in RAM or in external memory such as a SD card, Memory Stick or CF card. You can use this screen to change the map that is currently being viewed, and to copy or delete maps.

Find

Find brings up the find screen which can search for any feature by name, street address, street intersection, or place by category.

Directions

Directions brings up the screen that allows you to generate directions from point to point. The start and end points can either be selected from the map or you can input a street address or choose a location from the GeoMarks.

Maplets

Maplets allows you to create a small map that contains custom location data. Each maplet created is specific to a specific Mapopolis map.

GPS

The GPS screen allows you configure the connection method and other GPS settings. This screen is also used to start and stop the GPS unit and to get latitude, longitude, velocity and other GPS-provided information.

Settings

The settings screen allows you to customize Mapopolis. The settings screen can be used to set map colors and to change display options.

Help

The help button takes you to the quick start guide which provides basic information on using Mapopolis. The quick start guide is intended for beginners and is not as detailed as this manual.

6. Maps screen

The Maps screen displays a list of maps and maplets that are available on the handheld. Once a map is selected by tapping its name to highlight it, the map can be viewed by tapping the View button. If an external memory card, such as a SD card, CF card or memory stick is present, the Copy button will copy the map to the card. Copying the map doesn't delete it from its current location. The Delete button will delete the currently highlighted map.

The Beam button can be used to beam demo maps to another handheld. As beaming non-demo maps is a violation of copyright laws, beaming has been disabled for all other map levels.

The Go To Card button allows you to manage maps on external storage devices. The copy button will copy the map to the device RAM. Maps that are viewed from external storage are moved into RAM for faster viewing, when closing the application you will be provided with the option to remove the maps from RAM.

Checking the Load Contiguous Maps checkbox will load all county maps adjacent to the currently selected map, they will appear as one large map. Using this, you can create a map of your metro area from several county maps. When using Major Roads Maps to generate cross-country routes, the Load Contiguous Maps checkbox must be checked.

VFS and External Memory

Palm OS versions 4.0 and later use a system called Virtual Filing System (VFS) to access applications and databases stored in external memory. VFS cannot access applications and databases directly from the external memory. Mapopolis must copy the map from external memory to RAM first before being able to view or beam the map. Maps can be deleted directly from VFS.

When you use the Copy button, the selected map is copied to external memory, if your PDA is VFS compatible and has a card inserted. Mapopolis will create the directory: Palm\Programs\Mapopolis if it does not already exist and will place the map to that directory. There are a number of third-party applications that can be used to copy maps to external storage. We suggest using Mapopolis to copy maps, as Mapopolis preserves the label of the map when it is copied to external memory and will store all of the maps in one place.

In order to view a map that you have saved in external memory, you must have enough RAM for that map. Mapopolis copies the map to RAM first and then loads it from RAM. When you exit Mapopolis, you will be prompted: "Some maps were automatically transferred to RAM. Would you like to have these maps removed from RAM?" Selecting "yes" will delete only the maps that you copied to RAM from the external memory during the current session. Maps that you have copied to RAM from the external memory previously and did not remove will not be deleted.

It is possible to move Mapopolis to external memory and run the application directly off of the card.

7. Find

There are several ways to search for locations on the maps. You can search by name, or by category for landmarks and businesses. You can search for street intersections or addresses. Mapopolis can also access the Palm address book, thus allowing you to find the address of a contact without requiring cutting-and-pasting. Use the pick list in the title bar to choose which type of search you want to perform. If you are searching on an Enhanced or Platinum, Platinum +GPS or Navigator map, you can restrict your search to a specific city by choosing it from the city drop-list right under the Find title.

7.1 Searching for a Street Address

To search for a street address, select “Address or Feature” from the drop-list in the title-bar area. Ensure that the Address check box is checked. Enter the address number and street in the “address” field. Enter the number of the street, a space, then the street name. Omit directional indications such as north and south, both versions will appear in the search results if they exist on the map. From the results in the bottom box, highlight the address you want. The “Go To” button will display the map view with the address highlighted and centered. If there is more than one entry, indicated by “>1” to the right of a listing, and you select “Go To”, the application will zoom out until all of the entries are displayed and you can choose to zoom in on the address you want. The Highlight button will highlight the selected address without changing the position of the map. A house icon will mark the selected address.

For example, if you are searching for 225 East 81st Street, you would enter “225 81”, then select “Find”. The result might be 225 E 81st St and 225 W 81st St. Select 225 E 81st St, then “Go To” or “Highlight” to see the address on the map view screen.

7.2 Searching for a Street, City or Place

To search for a street address, select “Address or Feature” from the drop-list in the title-bar area. If you are searching for a street, check the street check box; for a city, check the city check box and for a landmark or business location, check the place box. Enter the first few letters of the name, then tap find. All matching names will be displayed. Scroll through the list by tapping the up and down arrow icons.

The feature name will be followed by >1 if the name occurs more than once in the map file. If more than 35 features match the request, the last item in the list will be (view more matches). Tap this entry to view the next set of matches.

To select a location, tap on its name and then push either the Go To button or the Highlight button. The Go To button will cause the map position to change to display the selected feature. The selected feature will also be highlighted. The Highlight button will highlight the selected feature without changing the position of the map.

7.3 Searching for a Contact's Address

To search for a contact's address, select "Address or Feature" from the drop-down-list in the title-bar area. Check the Addr Book checkbox. Key part or all of the contact's name into the Name field, then click the find button. Choose the contact's name from the box, and click on either the Go To button or the Highlight button.

The Go To button will cause the map position to change to show the selected feature. The selected intersection will also be highlighted. The Highlight button will highlight the selected intersection without changing the position of the map.

7.4 Searching for a Street Intersection

To search for a street intersection, select "Street Intersection" from the drop-down-list in the title-bar area. Enter any part of the name of each street and tap "Find". Select the first street by tapping its name in the top box. All streets that intersect the first street and contain text keyed into the second street blank will appear in the lower box. Tap the second intersecting street in the lower box and then click on either the Go To button or the Highlight button.

The Go To button will cause the map position to change to show the selected feature. The selected intersection will also be highlighted. The Highlight button will highlight the selected intersection without changing the position of the map.

7.5 Searching for a Business Location or Landmark

To search for a business location or landmark, select "Place By Category" from the drop-down-list in the title-bar area. Businesses and landmarks are arranged in categories. Tap a category in the category list to view all the businesses or landmarks under that category in the place list box below. Scroll through either list by tapping the up and down arrow icons.

Check the Maplets only check box if you are interested only in the locations that you have created in your Maplets.

The business or landmark name will be followed by >1 if the name occurs more than once in the map file. If more than 35 business locations or landmarks match the request, the last item in the list will be (view more matches). Tap this entry to view the next set of matches.

To select a feature, tap its name and then push either the Go To button or the Highlight button. The Go To button will cause the map position to change to show the selected feature. The selected feature will also be highlighted. The Highlight button will highlight the selected feature without changing the position of the map.

8. Directions

Mapopolis can generate turn-by-turn directions right on your handheld. The start and end points can be set by selecting them from the map, by using the “find” button and inputting an address or by selecting them from the GeoMarks list of recently used locations that is accessed by clicking the downward arrow towards the right of the screen.

Once the start and end points are selected, tap either “Step by Step” or “Map It” to generate the route and to display either written turn-by-turn directions or the route traced in Bold on the map, respectively.

When viewing on the map, tapping the box with an “R” in the upper right corner of the map view will bring you straight to the turn-by-turn text directions. Tapping the “M” in the upper right corner of the directions text view will bring you to the map with the route highlighted.

Generating Long-Distance Directions with Major Roads Maps

Mapopolis Major Roads Maps provide the capability to generate coast-to-coast turn-by-turn directions without requiring an internet or pc connection. To generate a long-distance route, you will need the origin and destination detailed maps as well as all Major Roads Maps necessary to connect the two. Once all of the necessary maps are loaded, the route can be generated as described above.

9. Maplets

Maplets are user-built collections of landmarks that are shown as overlays to a base map. For example, you might create a Maplet called my places and add the locations of your house, your office, and your business contacts, etc. Each of these locations will then appear along with the map on which they were defined.

Maplets can be shared. They are saved to your PC when you HotSync (typically C:\Program Files\Palm\UserName\Backup). From there, they can be emailed to others, posted on your web site, etc. They can also be beamed from handheld to handheld using the beam button on the maps screen. Our web site has a Maplet Exchange where you can post your Maplets and download those built by others.

All sets of Maplets based on a Mapopolis map will be shown together with the map. This allows you to build one Maplet of personal points, one of your important business locations, and one for your out-of-town visitors, etc.. The Maplets can then be shared individually.

9.1 Creating a maplet

Tap the Create a New Maplet button from the Maplets screen to create a new Maplet. Enter the author's initials, the Maplet name and Maplet description. The author's initials and Maplet name are used to create a system name for the Maplet, and thus are required fields. Author's initials are included to differentiate Maplets created by different authors if the name happens to be the same. Then tap "Create Maplet" to finish the process.

9.2 Adding Locations to Maplets

Tap the Add a Location to a Maplet button, on the Maplets screen. The Maplet must be created prior to adding locations. The map screen displays the message Tap Position for New Location. The map may be dragged or zoomed until the desired location is found. Tapping the screen selects the position for the new Maplet location. A form is displayed for you to enter information about the location. Highlight the Maplet that the location should be added to in the "Maplet to contain the new location" box.

9.3 Edit info / Edit Locations

To Edit the Maplet Information, select the Maplet from the list on the "Maplets" screen and choose Edit Info to edit the Maplet's name, author, and description.

To edit a location, tap Edit Locations on the "Maplets" screen. Information about the location and its position can be edited using this function.

10. GPS

Mapopolis supports GPS devices that conform to the NMEA 0183 standard at 4800, 9600 and 19200 baud. Depending on the type of handheld and GPS device that you own, the GPS device can be connected to the Serial port, the Springboard Slot of a Handspring Visor, as Memory Stick or SD card, a CF module or via the infrared port or via Bluetooth . The connection type can be selected by the drop-down box at the top of the GPS settings screen.

A typical procedure when using a GPS device is to first connect the GPS device to the PDA as specified by the GPS manufacturer. Power on the GPS device, if it has an external power source, and then turn on your PDA. Start Mapopolis, then tap Menu button in the toolbar then the GPS button in the menu, and then click Start GPS. Be patient it might several seconds to indicate that your GPS device is started and several minutes for a position fix. Once the position is fixed, the coordinates will be shown on the GPS screen.

10.1 GPS Settings

Connection Type

Mapopolis Supports connecting to GPS devices via Serial connections, MemStick connections, CF connections, Infrared connections and Bluetooth connections. The appropriate connection method is selected from the drop-box at the top of the GPS settings screen. Consult your GPS device's documentation for information about its connection mechanism.

Auto-scroll map - when checked, the map will scroll automatically to keep the GPS position at the center of the screen.

Auto-rotate map – when checked, the map will automatically rotate the map so that the cardinal direction closest to the direction of travel will always be towards the top of the screen

Keep device power on for 1 hr – when checked, the handheld's power will be kept on for one hour from the last user interaction. ***WARNING***, leaving this option checked may cause the device's batteries to become existentially discharged if the device is accidentally turned on or if the device is turned on automatically by another program.

Display GPS data on map – when checked, the latitude, longitude and velocity will be displayed on the map while a GPS device is connected and running.

Restart GPS at program start – when checked, the restart commands will be sent automatically to the GPS device when Mapopolis is restarted. This will cause the GPS to release its current fix and re-obtain a fix. Un-checking this box allows you to leave Mapopolis temporarily without losing your GPS fix.

10.2 Special Instructions for Using a Bluetooth GPS Device

Mapopolis supports connecting to a GPS device over Bluetooth. To connect to a Bluetooth GPS, first open the GPS Settings screen and choose Use Bluetooth GPS from the drop-down-box.

Click on Save, to save the change and return to the GPS screen. Then click the Start GPS button. Wait a few moments while the Bluetooth Manager searches for devices within range. When the

list is displayed, choose the Bluetooth GPS unit from the list. If you receive the message “No Bluetooth devices were found” the GPS unit may not be powered on or may be out of range.

11. Settings

Display Street Names – when checked, street name labels are shown on the map

Display City/Town Names – when checked, city & town boundaries along with their names are shown on the map

Display Landmarks – when checked, icons for landmarks are shown on the map

Display Coordinates On Tap – when checked, GPS coordinates are shown in the box that is displayed on-tap along with the street address

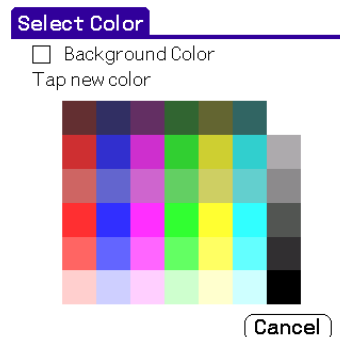
Use Alternate Font – when checked, a text for street names is displayed in a larger font so that it is easier to read, less street names can be displayed on the screen.

Show Splash Screen at Start – when checked, the initial splash screen is displayed at program start

Use Metric Units – when checked, distances are displayed in metric units, un-checking this causes Mapopolis to use US units

Set Color

Mapopolis allows you to change the background color, the color of roads, landmarks, water and your current route.



12. Latest Updates, Technical Support and Additional Information

Mapopolis makes updates to the map data available, for an additional fee, from our website at www.mapopolis.com. Updates may also be available from the same source that you obtained your original subscription or CD.

The most recent viewer software is always available for download at www.mapopolis.com. Currently, Mapopolis does not charge for viewer-software updates.

If you need assistance or have any questions or comments about Mapopolis, please visit our website at www.mapopolis.com/contact.jsp for the most current contact information.

13. Solutions to Common Problems

Download Problem / Chime Plug-In

The Chime plugin for Netscape recognizes .pdb files as 3D molecules to be viewed by the Chemscape chemical information viewer. This will cause problems with map downloads. Here's how to avoid this problem: Go to the map look-up page and find the map that you want. Right click on the map link and select "save link as ..." and then save it to your desktop. Open the Palm install tool and drag the map file from your desktop into the Palm install tool window, then HotSync.

The Route not shown on the map

The most common reason that the current route does not appear to be shown on the map is that the current route color has been changed to be the same as the road color or background color. To resolve this, click on the menu button in the toolbar, click on the settings button, and then click on the set colors drop-box. Choose "Route Color" from the drop box. On the color screen that is displayed, choose a color that is not being used for anything else. This should resolve the problem

Road lines are not shown, but the names are

The most common reason that roads lines appear to be missing from the map is that the road color has been changed to be the same as the background color. To resolve this, click on the menu button in the toolbar, click on the settings button, and then click on the set colors drop-box. Choose each of the "Road Color" options from the drop box. For each, on the color screen that is displayed, choose a color that is not being used for anything else. This should resolve the problem

My GPS Device Isn't Working

Due to the wide variety of GPS devices present on the market, it is impossible to test Mapopolis with all of them. Most GPS devices support the NMEA protocol, and thus are supported by Mapopolis. More information on support for specific GPS devices is available at www.mapopolis.com/gpssupport.jsp.

14. License Agreement

1. General Description. This binary code license ("License") contains rights and restrictions associated with use of the accompanying Mapopolis software and all included documentation ("Software"). The term "Software" shall include any upgrades, modifications and new versions of the Software furnished or sold by Licensor to Licensee. Read the License carefully before installing the Software. By installing, copying, or otherwise using Software, you agree to be bound by the terms of this Agreement and to comply strictly with the terms and conditions of this License. If you do not agree with the terms of this license, you may not use the Software but should promptly return the Software to Mapopolis.com, Inc. or the distributor for a refund.

2. Limited License Grant. Mapopolis.com, Inc. ("Licensor") grants to you ("Licensee") a non-exclusive, non-assignable, non-transferable limited license to use the Software on any handheld device or PDA for which it is designed.

3. No Modification. Licensee may not modify the Mapopolis files or executables.

4. Further Restrictions. Software is confidential copyrighted information of Mapopolis.com, Inc. and title to all copies is retained by Mapopolis.com, Inc.. Software may not be leased, rented, assigned, or sublicensed, in whole or in part. Licensee warrants that it will not use or redistribute the Software against the provisions of this license agreement.

5. Compliance with Other Agreements. Licensee accepts full responsibility for use of the Software including, but not limited to, acceptance of full responsibility pursuant to third party software and licensing agreements regarding the use of the Software to modify, examine, or otherwise process such third party software.

6. Disclaimer of Warranty. The Software is provided "AS IS," without any warranty or representation of any kind. ALL EXPRESS OR IMPLIED REPRESENTATIONS AND WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT, ARE HEREBY EXCLUDED.

7. Limitation of Liability. MAPOPOLIS.COM, INC. SHALL NOT BE LIABLE FOR ANY DAMAGES SUFFERED BY LICENSEE OR ANY THIRD PARTY AS A RESULT OF USING OR DISTRIBUTING SOFTWARE. WITHOUT LIMITING THE GENERALITY OF THE PRECEDING SENTENCE, IN NO EVENT WILL MAPOPOLIS.COM, INC. BE LIABLE FOR ANY LOST REVENUE, PROFIT OR DATA, OR FOR DIRECT, INDIRECT, SPECIAL, CONSEQUENTIAL, INCIDENTAL OR PUNITIVE DAMAGES, HOWEVER CAUSED AND REGARDLESS OF THE THEORY OF LIABILITY, ARISING OUT OF THE USE OF OR INABILITY TO USE SOFTWARE, EVEN IF MAPOPOLIS.COM, INC. HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

8. Termination. Licensee may terminate this License at any time by destroying all copies of Software. This License will terminate immediately without notice from Mapopolis.com, Inc. if

Licensee fails to comply with any provision of this License. Upon such termination, Licensee must destroy all copies of Software.

9. U.S. Export Regulations. Software, including technical data, is subject to U.S. export control laws, including the U.S. Export Administration Act and its associated regulations, and may be subject to export or import regulations in other countries. Licensee agrees to comply strictly with all such regulations and acknowledges that it has the responsibility to obtain licenses to export, re-export, or import Software. Software may not be downloaded, or otherwise exported or re-exported (i) into, or to a national or resident of, Cuba, Iraq, Iran, North Korea, Libya, Sudan, Syria or any country to which the U.S. has embargoed goods; or (ii) to anyone on the U.S. Treasury Department's list of Specially Designated Nations or the U.S. Commerce Department's Table of Denial Orders.

10. Governing Law, Jurisdiction and Venue. Any action related to this License will be governed by Ohio law and controlling U.S. federal law. Jurisdiction and venue for any action arising hereunder shall lie in the Courts of Common Pleas, Cuyahoga County, Ohio or federal courts situated in the Northern District of Ohio, Eastern Division.

11. Severability. If any of the above provisions are held to be in violation of applicable law, void, or unenforceable in any jurisdiction, then such provisions are herewith waived to the extent necessary for the License to be otherwise enforceable in such jurisdiction. However, if in Licensors' opinion deletion of any provisions of the License by operation of this paragraph unreasonably compromises the rights or increase the liabilities of Licensor or its licensors, Licensor reserves the right to terminate the License and refund the fee paid by Licensee, if any. Such refund shall be Licensee's sole and exclusive remedy.

12. No Waiver. No waiver by Licensor of any breach of any provision of this Agreement shall be effective unless in a writing signed by Licensor. No waiver shall constitute a continuing waiver unless expressly provided in the writing signed by Licensor.

13. UCC Applicability. To the extent the provisions of this License are not inconsistent therewith, this License shall be governed by the Uniform Commercial Code as adopted in Ohio.

14. Entire Agreement. This License constitutes the entire agreement between the parties respecting the subject matter hereof and thereof, and supersedes all previous proposals, negotiations, representations, warranties, commitments, writings and communications between parties. The terms of this License shall prevail regardless of any variance with the terms of any other document or writing between the parties.

END-USER TERMS PERTAINING TO NAVTECH DATA

The data ("Data") is provided for your personal, internal use only and not for resale. It is protected by copyright, and is subject to the following terms and conditions which are agreed to by you, on the one hand, and Mapopolis.com, Inc. ("MAPOPOLIS") and its licensors (including their licensors and suppliers) on the other hand.

© 2001 Navigation Technologies Corporation All rights reserved.

The Data for areas of Canada includes information taken with permission from Canadian authorities, including: © Her Majesty the Queen in Right of Canada, © Queen's Printer for Ontario.

TERMS AND CONDITIONS

Personal Use Only. You agree to use this Data together with Mapopolis for the solely personal, non-commercial purposes for which you were licensed, and not for service bureau, time-sharing or other similar purposes. Accordingly, but subject to the restrictions set forth in the following paragraphs, you may copy this Data only as necessary for your personal use to (i) view it, and (ii) save it, provided that you do not remove any copyright notices that appear and do not modify the Data in any way. You agree not to otherwise reproduce, copy, modify, decompile, disassemble or reverse engineer any portion of this Data, and may not transfer or distribute it in any form, for any purpose, except to the extent permitted by mandatory laws.

Restrictions. Except where you have been specifically licensed to do so by MAPOPOLIS, and without limiting the preceding paragraph, you may not (a) use this Data with any products, systems, or applications installed or otherwise connected to or in communication with vehicles, capable of vehicle navigation, positioning, dispatch, real time route guidance, fleet management or similar applications; or (b) with or in communication with any positioning devices or any mobile or wireless-connected electronic or computer devices, including without limitation cellular phones, palmtop and handheld computers, pagers, and personal digital assistants or PDAs.

No Warranty. This Data is provided to you "as is," and you agree to use it at your own risk. MAPOPOLIS and its licensors (and their licensors and suppliers) make no guarantees, representations or warranties of any kind, express or implied, arising by law or otherwise, including but not limited to, content, quality, accuracy, completeness, effectiveness, reliability, fitness for a particular purpose, usefulness, use or results to be obtained from this Data, or that the Data or server will be uninterrupted or error-free.

Disclaimer of Warranty: MAPOPOLIS AND ITS LICENSORS (INCLUDING THEIR LICENSORS AND SUPPLIERS) DISCLAIM ANY WARRANTIES, EXPRESS OR IMPLIED, OF QUALITY, PERFORMANCE, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT. Some States, Territories and Countries do not allow certain warranty exclusions, so to that extent the above exclusion may not apply to you.

Disclaimer of Liability: MAPOPOLIS AND ITS LICENSORS (INCLUDING THEIR LICENSORS AND SUPPLIERS) SHALL NOT BE LIABLE TO YOU: IN RESPECT OF ANY CLAIM, DEMAND OR ACTION, IRRESPECTIVE OF THE NATURE OF THE CAUSE OF THE CLAIM, DEMAND OR ACTION ALLEGING ANY LOSS, INJURY OR DAMAGES, DIRECT OR INDIRECT, WHICH MAY RESULT FROM THE USE OR POSSESSION OF THE INFORMATION; OR FOR ANY LOSS OF PROFIT, REVENUE, CONTRACTS OR SAVINGS, OR ANY OTHER DIRECT, INDIRECT, INCIDENTAL, SPECIAL OR

CONSEQUENTIAL DAMAGES ARISING OUT OF YOUR USE OF OR INABILITY TO USE THIS INFORMATION, ANY DEFECT IN THE INFORMATION, OR THE BREACH OF THESE TERMS OR CONDITIONS, WHETHER IN AN ACTION IN CONTRACT OR TORT OR BASED ON A WARRANTY, EVEN IF MAPOPOLIS OR ITS LICENSORS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. Some States, Territories and Countries do not allow certain liability exclusions or damages limitations, so to that extent the above may not apply to you.

Disclaimer of Endorsement: Reference to any products, services, processes, hypertext links to third parties or other Data by trade name, trademark, manufacturer, supplier or otherwise does not necessarily constitute or imply its endorsement, sponsorship or recommendation by MAPOPOLIS or its licensors. Product and service information are the sole responsibility of each individual vendor. The Navigation Technologies name and logo, the NAVTECH and NAVTECH ON BOARD trademarks and logos, and other trademarks and trade names owned by Navigation Technologies Corporation may not be used in any commercial manner without the prior written consent of Navigation Technologies.

Export Control. You agree not to export from anywhere any part of the Data provided to you or any direct product thereof except in compliance with, and with all licenses and approvals required under, applicable export laws, rules and regulations.

Indemnity. You agree to indemnify, defend and hold MAPOPOLIS and its licensors (including their respective licensors, suppliers, assignees, subsidiaries, affiliated companies, and the respective officers, directors, employees, shareholders, agents and representatives of each of them) free and harmless from and against any liability, loss, injury (including injuries resulting in death), demand, action, cost, expense, or claim of any kind or character, including but not limited to attorney's fees, arising out of or in connection with any use or possession by you of this Data.

Entire Agreement. These terms and conditions constitute the entire agreement between MAPOPOLIS (and its licensors, including their licensors and suppliers) and you pertaining to the subject matter hereof, and supersedes in their entirety any and all written or oral agreements previously existing between us with respect to such subject matter.

Governing Law. The above terms and conditions shall be governed by the laws of the Illinois, without giving effect to (i) its conflict of laws provisions, or (ii) the United Nations Convention for Contracts for the International Sale of Goods, which is explicitly excluded. You agree to submit to the jurisdiction of Illinois or any and all disputes, claims and actions arising from or in connection with the Data provided to you hereunder.

Government End Users. If the NAVTECH Data is being acquired by or on behalf of the United States government or any other entity seeking or applying rights similar to those customarily claimed by the United States government, (i) for acquisitions conducted by the Department of Defense, the NAVTECH Data is licensed with "Limited Rights" in accordance with the rights set forth at DFARS 252.227-7013(b)(3), Technical Data-Noncommercial Items, and NAVTECH Data delivered or otherwise furnished with "Limited Rights" shall be marked with the following

“Limited Rights Notice” set forth at DFARS 252.227-7013(f)(3), and shall be treated in accordance with such Notice:

Limited Rights

Contract No.: _____

Contractor (Manufacturer/ Supplier) Name: Navigation Technologies Corporation

Contractor (Manufacturer/Supplier) Address: 222 Merchandise Mart Plaza, Suite 900, Chicago, Illinois 60654

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data-Noncommercial Items clause contained in the above identified contract. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify the above named Contractor.

and; (ii) for civilian agency acquisitions, the NAVTECH Data is licensed in accordance with the rights set forth at FAR 52.227-14(g)(1), Rights in Data-General (Protection of limited rights data and computer software). In the event that the Contracting Officer requires the delivery of limited rights NAVTECH Data that has been withheld or would otherwise be withholdable in accordance with FAR 52.227-14(g)(1), the NAVTECH Data is licensed with “Limited Rights” as set forth in the following “Limited Rights Notice” at FAR 52.227-14(g)(2) (Alternate II), which shall be affixed to the NAVTECH Data and the NAVTECH Data shall be treated in accordance with such Notice (which shall be marked on any reproduction of these data, in whole or in part):

LIMITED RIGHTS NOTICE (JUN 1987)

These data are submitted with limited rights under Government Contract No. _____ (and subcontract _____, if appropriate). These data may be reproduced and used by the Government with the express limitation that they will not, without written permission of the Contractor, be used for purposes of manufacture nor disclosed outside the Government; except that the Government may disclose these data outside the Government for the following purposes, if any, provided that the Government makes such disclosure subject to prohibition against further use and disclosure: There are no additional purposes permitting disclosure of such Data.

The manufacturer/supplier of the Data is Navigation Technologies Corporation 222 Merchandise Mart Plaza, Suite 900, Chicago, Illinois 60654.

If the Contracting Officer refuses to use either of the licenses provided in (i) or (ii), herein, the Contracting Officer must notify Navigation Technologies Corporation prior to seeking additional or alternative rights in the NAVTECH Data.